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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/659,870	09/13/2000	Joseph P. Coniglione	P.21.2028	7000

7590 05/13/2004

LAW OFFICE OF LEO ZUCKER
50 MAIN STREET
SUITE 480
WHITE PLAINS, NY 10606-1964

EXAMINER

LUGO, DAVID B

ART UNIT	PAPER NUMBER
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2634

DATE MAILED: 05/13/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/659,870

Applicant(s)

CONIGLIONE, JOSEPH P.

Examiner

David B. Lugo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-26 and 28-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15, 19-21, 23 and 25 is/are rejected.
- 7) ☒ Claim(s) 14, 16-18, 22, 24, 26 and 28-33 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. The indicated allowability of claim 19 is withdrawn in view of the newly disclosed reference to Smith et al. EP 0 905 528. Rejections based on the newly cited reference follow.

Claim Objections

2. Claims 19-26 and 28-33 are objected to because of the following informalities:
 - a. Claim 19, line 15, "an output" should be --the output--, to indicate that there is a single output of the front end stage and avoid confusion in line 20 where "the output" is referred to, but two outputs are previously implied from lines 10 and 15, making it unclear which of the two outputs is being referenced.
 - b. Claim 29, line 15, "an output" should be --the output--.Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 15, 19-21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. European Patent Application 0 905 528 (submitted by applicant).
5. Regarding claim 19, Smith et al. disclose a multi-mode receiver in Fig. 3, comprising a front end stage connected to an antenna, where a 1090 MHz RF input signal is provided to RF amplifier 21, a mixer 23 for converting the amplified RF signals to IF, a first IF channel

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comprising narrowband filter 34, a second IF channel including wideband IF filter 30, and a processor 12C coupled to the first and second channels, where narrowband filter 34 of the first IF channel is coupled to the output of the front end stage through wideband IF filter 30 of the second channel.

6. Smith et al. does not expressly disclose that the front end stage comprises a RF filter. However, RF filters are well known in the art for filtering a received RF signal to provide a RF signal at a desired frequency.

7. It would have been obvious to one of ordinary skill in the art to use a RF filter to provide the 1090 MHz filtered signal to the amplifier 21 of the front end stage of Smith et al. in order to eliminate signals at unwanted frequencies.

8. Regarding claim 15, the first IF channel includes amplifier 31 for amplifying Mode S signals, which are PSK signals.

9. Regarding claim 20, Smith et al. does not expressly disclose the 3-dB bandwidth of a RF wide band filter is about 20 MHz. However, a 3-dB bandwidth for the filter is considered a design consideration that fails to patentably distinguish over Smith et al.

10. Regarding claim 21, a RF signal of 1090 MHz is supplied to RF amplifier 21, broadly considered to be about 1030 MHz.

11. Regarding claim 23, the bandwidth of filter 34 is 4 MHz, broadly considered to be about 7.5 MHz.

12. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. in view of Baker U.S. Patent 5,199,109.

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13. Regarding claim 25, Smith et al. teach a multi-mode receiver as disclosed above, but do not expressly disclose that the front end stage includes overload limiting diodes between the antenna and the RF filter.

14. Baker discloses the use of overload limiting diodes 201 between an antenna 22 and a RF front end 202 (see col. 7, lines 6-12, Fig. 4).

15. It would have been obvious to one of ordinary skill in the art to use overload limiting diodes as taught by Baker between the antenna and the front end of the receiver of Smith et al. in order to prevent overload of the receiver from extremely strong signals, as stated by Baker in column 7, lines 6-9.

Allowable Subject Matter

16. Claims 26 and 29-33 would be allowable if amended to overcome the objection set forth in this Office action.

17. Claims 14, 16-18, 22, 24, 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, and amended to overcome the objection set forth in this Office action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **David B. Lugo** whose telephone number is (703) 305-0954.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Stephen Chin**, can be reached at (703) 305-4714.

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Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

P.O. Box 1450

Alexandria, VA 22313-1450

or faxed to:


(703) 872-9306

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

dl

5/5/04


YOUNG T. TSE
PRIMARY EXAMINER